BIOGRAPHICAL SKETCH

NAME: Janice A. Dye

POSITION TITLE: Research Biologist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
University of MN, St. Paul	D.V.M.	1985	Doctor of Veterinary Medicine
University of Illinois, Urbana	Internship	1985-86	Small animal medicine and surgery
University of Illinois, Urbana	Residency	1986-89	Internal medicine (small animal)
University of Illinois, Urbana	M.S.	1989	Pharmacokinetics/pharmacology/toxicology
N.C. State University, Raleigh	Ph.D.	1998	Comparative Biomedical Sciences (cell biology)

PROFESSIONAL EXPERIENCE:

- Research Biologist, Pulmonary Toxicology Branch, Experimental Toxicology Division, National Health and Environmental Effects Research Laboratory (NHEERL), USEPA, RTP, NC, 1995 present.
- Adjunct Associate Professor, Department of Clinical Sciences (DOCS), College of Veterinary Medicine, N.C. State University, Raleigh, NC, 1998 present.
- Postdoctoral Fellow, Center for Environmental Medicine & Lung Biology (CEM & LB), University of N.C., Chapel Hill, NC, 1992 - 1994.
- Physical Scientist, Pulmonary Toxicology Branch, USEPA, RTP, NC, 1991 1992.
- Postdoctoral Fellow, CEM & LB, University of N.C., Chapel Hill, NC, 1990 1991.
- Postdoctoral Fellow, Pulmonary mechanics research laboratory, Dept. of Veterinary Clinical Medicine, College of Veterinary Medicine, Univ. of Illinois, Champaign-Urbana, Illinois, 1989 1990.
- Teaching Associate, Department of Veterinary Clinical Medicine, Veterinary Medical Teaching Hospital, University of Illinois, Champaign-Urbana, Illinois, 1985 1989.
- Research Assistant, Dept. of Surgery, College of Medicine, Univ. of MN, Minneapolis/St. Paul, MN, 1978 1985.

PROFESSIONAL SOCIETIES, LICENSES, AND SPECIALTY BOARD CERTIFICATION:

- Diplomate, American College of Veterinary Internal Medicine (small animal internal medicine), 1991.
- Wisconsin State Veterinary Medical Association, Licensed 1985.
- American Veterinary Medical Association
- Veterinary & Comparative Respiratory Society

- Phi Zeta, National Veterinary Honors Society
- · American Society of Investigative Pathology
- ACVIM Infectious Disease Study Group

SELECTED AWARDS AND HONORS:

- **EPA Special Act Award** (2005) in recognition of committee efforts related to establishing a confocal / fluorescent imaging core facility in NHEERL, USEPA, RTP.
- EPA Gold Metal Award (2003) in recognition of outstanding achievements as a member of NHEERL in establishing and implementing an integrated research program to define the potential health threat of ambient PM on the American public.
- EPA Scientific and Technological Achievement Award (STAA) Level 1 (2002). Co-investigator on an award entitled: Air pollution particles from the Utah Valley cause lung injury and inflammation in humans and animals.
- **EPA STAA honorable mention** (2000). Primary author of a manuscript awarded for its comprehensive and critical evaluation of the parallelisms between *in vivo* and *in vitro* investigations on ozone-induced pulmonary health effects.
- Loyd E. Boley Award (1990) given to the outstanding resident in the College of Veterinary Medicine, University of Illinois, in recognition of excellence in academic performance, research, teaching, and service.
- Comparative Respiratory Society Resident Research Abstract Award (1988) given in recognition of significant research in pulmonary medicine by a research trainee.

INVITED LECTURES/SYMPOSIA:

- "A role for metals in PM-associated adverse health effects." National Institute of Public Health and the Environment (RIVM), Bilthoven, The Netherlands 2001.
- "US EPA toxicologic studies of PM-associated metals." at a WHO, HEI and EU sponsoring meeting on Particulate Air Pollution, Brussels, Belgium 2001.
- 74th Western Veterinary Conference (WVC), Respiratory Diseases section. Presentations included: "Diagnostics for Feline Bronchopulmonary Disease, Therapy for Feline Bronchopulmonary Disease, Pollutants and Toxins in Small Animal Respiratory Medicine, and Respiratory Disease Case Management," Las Vegas, NV 2002.
- "Genetic influences on in vitro particulate matter-induced airway epithelial injury and inflammatory mediator release."
 20th VCRS Symposium Heterogeneity of the Airways, Boston, MA 2002.
- "Identification and characterization of disease using pulmonary function tests." Internal Medicine Specialist Series 21st ACVIM Forum, Charlotte, NC - 2003.

- "In vitro lung alveolar epithelial cell injury and inflammatory response to particulate matter-associated metals Modulation by exposure to TNF, IL-1, and IFN" 21th VCRS Symposium ARDS and Acute Lung Injury, San Antonio, TX 2003.
- "Use of whole body plethysmography to assess influences on rat strain and age on nonspecific airway responsiveness." 22^{th} VCRS Symposium Lung Injury Repair, Montreal, Quebec, CA 2004.
- Linking PM Source-to-Health Outcome: A veterinary internist's perspective of health effects research." College of Veterinary Medicine, NCSU, Raleigh, NC 2006.
- "Optimization of repeated bronchoalveolar lavage in rabbits." 24th VCRS Symposium Respiratory Infections, Jena, Germany, 2006.
- "Brominated-flame Retardants (BFRs) in Cats Possible Linkage to Feline Hyperthyroidism? 25th ACVIM Forum, Seattle, WA 2007.

ASSISTANCE/LEADERSHIP PROVIDED TO SCIENTIFIC COMMUNITY:

- Executive Committee member on Board of Directors, North Carolina Association for Biomedical Research (2007-present).
- Member of the Board of Directors, Veterinary & Comparative Respiratory Society (VCRS) (2003-present).
- EPA-RTP representative to the regional Visiting Pulmonary Scholars Program (2001 2004).
- Participant in an Intergovernmental Personnel Act (IPA) assignment (1998, 1999) between the USEPA and the College of Veterinary Medicine at North Carolina State University, serving as a visiting small animal internist.
- Ad Hoc reviewer: Environmental & Health Perspectives, Toxicology in Vitro, Environmental & Nutritional Interactions, Toxicology & Applied Pharmacology, Toxicologic Sciences, Toxicologic Pathology, Journal of Toxicology and Environmental Health, Inhalation Toxicology, American Journal of Physiology: Lung Cellular & Molecular Physiology, Journal of Leukocyte Biology, Journal Veterinary Internal Medicine, Advances in Small Animal Medicine & Surgery, Journal of the American Veterinary Medical Association, American Journal of Veterinary Research, Veterinary Medicine, Veterinary Pathology, The Veterinary Journal, ACVIM Forum abstracts, grant reviewer (STAR & NCER, USDA).

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

- Presentations on "Pulmonary toxicity of Utah Valley PM: Are empirical indices of adverse health effects coherent with the epidemiology?" at the WHO, HEI and EU sponsored meeting entitled, "Understanding the Health Effects of Particulate Air Pollution: Recent Advances and Outstanding Questions" (Brussels, Belgium 2001) and at the Scientific Advisory Board (SAB) Executive Council Evaluation of research at EPA, (R.T.P., NC 2000).
- Institutional Animal Care and Use Committee (IACUC) Member and Chair of Training Subcommittee (1995 1998).
- Member of the Search Committee for hiring an EPA-employed institutional laboratory animal veterinarian (1998 2000).
- Committee member to investigate establishing a confocal / fluorescent imaging core facility in NHEERL (2003- present).
- Committee member of the NHEERL PM Implementation Team for PM and air toxics research planning (2005- present).

SELECT PUBLICATIONS (of 37):

- <u>Dye JA</u>, Madden MC, Richards JH, Lehmann JR, Devlin RB, Costa DL. Ozone effects on airway responsiveness, lung injury, and inflammation. Comparative rat strain and *in vivo/in vitro* investigations. *Inhalation Tox*1999; 11:101-26.
- Costa DL, Gavett SH, Kodavanti UP, Watkinson WP, <u>Dye JA</u>, Dreher KL. Ambient particulate matter and health: what are the animals telling us? *In:* Mohr, U. Ed., *Disease and Exposure to Air Pollution*. Wash DC: ILSI Press, 1999; 185-194.
- <u>Dye JA</u>, Adler KB, Richards JH, Dreher KL. Role of soluble metals in oil fly ash-induced airway epithelial injury and cytokine gene expression. *Am J Physiol* 277 (*Lung Cell Mol Physiol* 21) 1999; L498-L510.
- Jiang N, Dreher KL, <u>Dye JA</u>, Li Y, Richards JH, Martin LD, and Adler KB. Residual oil fly ash induces cytotoxicity and mucin secretion by guinea pig epithelial cells via an oxidant-mediated mechanism. *Toxicol Appl Pharmacol* 2000; 163:221-230.
- <u>Dye JA</u>, Lehmann JR, McGee JK, Winsett DW, Ledbetter AD, Everitt JI, Ghio AJ, Costa DL. Acute pulmonary toxicity of particulate matter (PM) filters extracts in rats: Coherence with epidemiological studies in Utah Valley residents. *Environ Health Perspect* 2001; 109 (suppl 3):395-403.
- Pagan I, Costa DL, McGee JK, Richards JR, Dykstra M, <u>Dye JA</u>. Metals mimic airway epithelial injury induced *in vitro* by exposure to Utah Valley ambient particulate matter extracts. *J Toxic Env Health* 2003; Part A, 66:1-26.
- Williams KJ, Malarkey DE, Cohn LA, Patrick DJ, <u>Dye JA</u>, Toews GB. Spontaneous Feline Idiopathic Pulmonary Fibrosis: Fulfilling the Morphologic Criteria of Human IPF. *Chest* 2004, 125(6):2278-2288.
- Cohn LA, Norris CR, Hawkins EC, <u>Dye JA</u>, Johnson CA, Williams KJ. Identification and Characterization of an Idiopathic Pulmonary Fibrosis-Like Condition in Cats. *J Vet Intern Med* 2004, 18:632-641.
- <u>Dye JA</u> and Costa DL. Pulmonary Function Testing and Interpretation in Small Animals. In: King, L ed., *Small Animal Respiratory Diseases*, 1st Edn., Philadelphia: WB Saunders Co., 2004; 157-175.
- Dorman DC and <u>Dye JA</u>. Chemical Toxicities. In: Ettinger S and Feldman E eds., *Textbook of Veterinary Internal Medicine*, 6th Edn., Philadelphia: WB Saunders Co., 2005; 256-261.
- Dorman DC, Struve MF, Wong BA, <u>Dye JA</u>, Robertson ID. Correlation of Brain Magnetic Resonance Imaging Changes with Pallidal Manganese Concentrations in Rhesus Monkeys Following Subchronic Manganese Inhalation. *Toxicol Sci.* 2006; 92(1):219-227.

Dye JA. Pulmonary Function Tests. In: Tilley LP and Smith FWK eds., Blackwell's Five Minute Veterinary Consult:
 Diagnostic Procedures and Laboratory Tests, 1st Edn., Philadelphia: Lippincott Williams & Wilkins (in press).

 Dye JA, Venier M, Zhu YZ, Ward CA, Hites RA, Birnbaum LB. Elevated PBDE levels in pet cats: Sentinels for humans? (in submission).